LAW OFFICES OF

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EXECUTIVE SECRETARY

99-00584

June 29, 2000

Mr. David Waddell **Executive Secretary** Tennessee Regulatory Authority 460 James Robertson Parkway Nashville, TN 37243-0505

VIA FACSIMILE (615) 741-2336

Re: Antioch Water Company

Dear Mr. Waddell:

I am enclosing herewith the Engineers report. I received it by mail yesterday. After reviewing the same, if you have any questions, please do not hesitate to give me a call.

Very Truly Your

JGP/rlb

Enclosure

cc: Pat Murphy

ROY HIXSON, PE 3109 HWY 25 COTTONTOWN, TENNESSEE 37048 PHONE/FAX 1-615-325-4313

ANALYSIS OF ANTIOCH WATER COMPANY HENRY COUNTY, TENNESSEE

This is a statement of the Antioch Water Company's physical plant and operation for the purpose of determining a fair and equitable rate structure.

The Antioch Water Company is a privately owned system for the production and distribution of potable water which meets or exceeds the quality requirements of the Tennessee Department of Environment and Conservation(TDEC). There are 246 customers being served by this system. The system has 21,950 feet of 2" distribution line and 920 feet of 4" feed line with one well for supply capable of delivering 250 gallons per minute. Presently, there is a 1000 gallon pressure regulating tank with a chlorinating system. Each service is regulated by a 3/4 inch shut off valve. While it is true that the existing system does not meet current construction standards for water distribution systems, with loving care it has served the Antioch community for about 40 years.

I am sure that the continued viability of he system is in the best interest of everyone concerned. In order to establish a rate structure which is workable, I have established the estimated cost of replacement in kind using cost of construction from several sources. Obviously, it is difficult to equate one set of circumstances without some variations.

Installation cost:	Item	Rates Considered	Rate	Used	Total
	21,950ft-2" line	\$3.00per ft\$15.00		\$4.00 rock free	\$87800.00
	920 ft4" line	\$5.00 per ft\$18.0		\$6.00 rock free	5520.00
	246 boxes & valves	-		\$250 with out m	eter\$61500.00*
	Well & pumps	not available			\$10,000.00
	Chlorinator				1,000.00
	Shelter for well eq	uipment			5,000.0
	Computer	•			3,000.00
	Total				\$173820.00

* I did not find anyone who installs services without meters. The figure shown was derived by subtracting the cost of the meter from the installations I inquired about.

Historically, Antioch water Company has had an expenditure of \$6000.00 plus per year for supplies and back hoe Service. Since labor and materials are usually estimated to be about equal, it is safe to say that the maintenance cost of \$12,000.00 per year is realistic. Additionally, the task of monitoring the system (chlorinating, laboratory reports, drawing samples, purging lines, patroling lines for leaks and billing) must be accomplished on a regular basis. I estimate that on an average this will require 40 hours per week at \$25 per hour or \$1000.00 per month.

SUMMARY:

 Return on Investment--\$173820.00X .12
 \$20858.40

 Maintenance
 \$12000.00

 Operation
 \$52000.00

 Total
 \$84858.00

On a monthly basis the rate structure should support a minimum of \$7071.50 or on a per tap basis a minimum of \$28.75 per month.

With the economy of scale, some utilities offer a cheaper rate while the American Water Works Association (AWWA) has found the typical two person household will use 240 gallons per day with a tap fee of \$29.42 per month. I believe this analysis of the financial aspects of the Antioch Water Company is based on sound engineering principles.

Signed Roy Hixson, PE TN Lic. 4236

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Kipson, PE